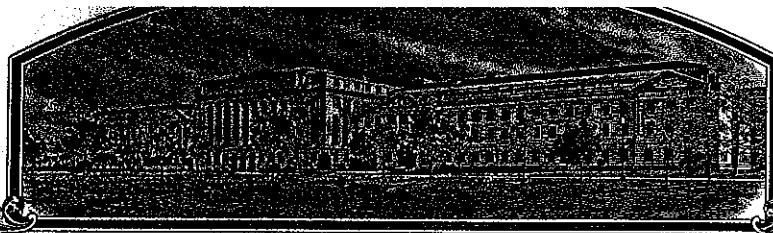


No.

200600051



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Sungenta Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, GARDEN

'STAYTON'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this ninth day of April, in the year two thousand and seven.



Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

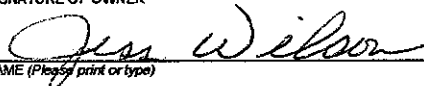
William L. Johnson
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Syngenta Seeds, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME	3. VARIETY NAME Stayton
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 600 N. Armstrong Place Boise, ID 83704		5. TELEPHONE (Include area code) (208) 322-7272	FOR OFFICIAL USE ONLY PVPO NUMBER 200600051 FILING DATE DECEMBER 29, 2005
		6. FAX (include area code) (208) 327-9319	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation	8. IF INCORPORATED, GIVE STATE OF INCORPORATION DE	9. DATE OF INCORPORATION February 25, 1975	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Charleen Ortel Syngenta Seeds, Inc. 600 N. Armstrong Pl. PO Box 4188 Boise, ID 83711-4188 Kim Briggs 6338 Highway 20-26 Nampa ID 83687 MAY 2/22/07			F E E S R E C E I V E D FILING AND EXAMINATION FEES: \$ 4,382.00 DATE 12/29/05 CERTIFICATION FEE \$ 768.00 DATE 3/06/07
11. TELEPHONE (Include area code) (208) 327-7246 465-8522	12. FAX (Include area code) (208) 327-9319 467-4559	13. E-MAIL charleen.ortel@syngenta.com Kim.briggs@syngenta.com	
14. CROP KIND (Common Name) Bean, Garden	15. FAMILY NAME (Botanical) Fabaceae	16. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
17. GENUS AND SPECIES NAME OF CROP Phaseolus vulgaris L.	18. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Statement that a Voucher Sample (4,000 viable untreated seeds or, for tuber propagated varieties, will be deposited and maintained in an approved public repository) 25 seed sample g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)	
20. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23) 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED 23. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)		25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.	
SIGNATURE OF OWNER  NAME (Please print or type) Jess Wilson		SIGNATURE OF OWNER NAME (Please print or type)	
CAPACITY OR TITLE Vice President	DATE 12/21/2005	CAPACITY OR TITLE Vice President	DATE 12/21/2005

(See reverse for instructions and information collection burden statement)

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvpindex.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/sg/seed.htm>.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 - (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Canada: March 2005, variety trial; Mexico: April 2005, variety trial; USA: April 2004, adaptability trial.

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

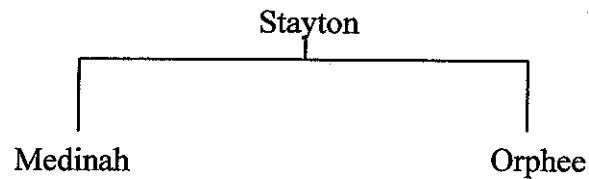
NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A
Origin and Breeding History
'Stayton'



'Stayton' originated from a hand pollinated cross between Syngenta Seeds, Inc. varieties Medinah and Orphee.

Mass selection breeding method was applied in F2 to accumulate the traits of seedling vigor and stress tolerance. Selection by pedigree method for 2 or 3 sieve, medium dark green pods was applied in generations F3 through F5. The F6 generation was bulk harvested to supply a seed source for further increases. 'Stayton' has been uniform and genetically stable for four generations of increases from the original F6. No variants were observed.

Exhibit B
Statement of Distinctness
'Stayton'

'Stayton' is a bush snap bean suitable for processing markets that most closely resembles the variety 'Medinah'. 'Stayton' differs statistically from 'Medinah' in the following traits.

1. 'Medinah' and 'Stayton' are significantly different in two-sieve pod length. 'Stayton' was 1.7 and 1.8 cm greater in pod length than 'Medinah' in Nampa, Idaho and Stanton, Minnesota, respectively. See Attachment B-1 a, thru f.
2. There was a significant difference in three-sieve pod length. 'Stayton' pod length was 2.1 cm longer than 'Medinah' in Nampa, Idaho, and 1.6 cm longer in Stanton, Minnesota. See Attachment B-2 a, thru f.

All reported values for two and three-sieve pod length are based on average measurements.

Two and three-sieve pod length data were collected from pods harvested in 2004 from each variety plot that consists of 100 plants in Nampa, Idaho and Stanton, Minnesota. Separate random samples from two and three-sieve lots were measured for pod length.

Exhibit B
Statement of Distinctness
'Stayton'

Explanation of statistical analysis variables used in the following attachments

SV2PLMAID = Two-Sieve Pod Length (cm), Medinah, Idaho
SV2PLSBID = Two-Sieve Pod Length (cm), Stayton, Idaho
SV2PLMAMN = Two-Sieve Pod Length (cm), Medinah, Minnesota
SV2PLSBMN = Two-Sieve Pod Length (cm), Stayton, Minnesota

SV2PLMAID = Three-Sieve Pod Length (cm), Medinah, Idaho
SV2PLSBID = Three-Sieve Pod Length (cm), Stayton, Idaho
SV2PLMAMN = Three-Sieve Pod Length (cm), Medinah, Minnesota
SV4PLSBMN = Three-Sieve Pod Length (cm), Stayton, Minnesota

200600051

Statistix 8.0

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Descriptive Statistics

Variable	N	Mean	SD	Minimum	Maximum
SV2PLMAID	20	11.615	0.6523	10.600	12.700
SV2PLSBID	20	13.300	1.0005	11.500	14.700

Attachment B-1a
Two-Sieve Pod Length (cm)
Descriptive Statistics
'Medinah' vs. 'Stayton'
Nampa, Idaho
2004

6

Statistix 8.0

4/7/2005, 11:02:11 AM

One-Way AOV for: SV2PLMAID SV2PLSBID

Source	DF	SS	MS	F	P
Between	1	28.3922	28.3922	39.8	0.0000
Within	38	27.1055	0.7133		
Total	39	55.4977			

Grand Mean 12.457 CV 6.78

	Chi-Sq	DF	P
Bartlett's Test of Equal Variances	3.29	1	0.0698
Cochran's Q	0.7017		
Largest Var / Smallest Var	2.3524		

Component of variance for between groups	1.38395
Effective cell size	20.0

Variable	Mean
SV2PLMAID	11.615
SV2PLSBID	13.300
Observations per Mean	20
Standard Error of a Mean	0.1889
Std Error (Diff of 2 Means)	0.2671

Attachment B-1b
Two-Sieve Pod Length (cm)
AOV
'Medinah' vs. 'Stayton'
Nampa, Idaho
2004

7

Statistix 8.0

4/7/2005, 11:02:32 AM

LSD All-Pairwise Comparisons Test

Variable	Mean	Homogeneous Groups
SV2PLSBID	13.300	A
SV2PLMAID	11.615	B

Alpha	0.05	Standard Error for Comparison	0.2671
Critical T Value	2.024	Critical Value for Comparison	0.5407

All 2 means are significantly different from one another.

8

Attachment B-1c
Two-Sieve Pod Length (cm)
Comparison of Means
'Medinah' vs. 'Stayton'
Nampa, Idaho
2004

200600051

Statistix 8.0

4/7/2005, 10:57:35 AM

Descriptive Statistics

Variable	N	Mean	SD	Minimum	Maximum
SV2PLMAMN	20	11.435	0.9080	9.8000	13.100
SV2PLSBMN	20	13.210	1.0331	11.200	15.200

Attachment B-1d
Two-Sieve Pod Length (cm)
Descriptive Statistics
'Medinah' vs. 'Stayton'
Stanton, Minnesota
2004

9

Statistix 8.0

4/7/2005, 10:58:18 AM

One-Way AOV for: SV2PLMAMN SV2PLSBMN

Source	DF	SS	MS	F	P
Between	1	31.5062	31.5062	33.3	0.0000
Within	38	35.9435	0.9459		
Total	39	67.4497			

Grand Mean 12.322 CV 7.89

	Chi-Sq	DF	P
Bartlett's Test of Equal Variances	0.31	1	0.5793
Cochran's Q	0.5642		
Largest Var / Smallest Var	1.2944		

Component of variance for between groups	1.52802
Effective cell size	20.0

Variable	Mean
SV2PLMAMN	11.435
SV2PLSBMN	13.210
Observations per Mean	20
Standard Error of a Mean	0.2175
Std Error (Diff of 2 Means)	0.3076

Attachment B-1e
Two-Sieve Pod Length (cm)
AOV
'Medinah' vs. 'Stayton'
Stanton, Minnesota
2004

10

Statistix 8.0

4/7/2005, 10:59:07 AM

LSD All-Pairwise Comparisons Test

Variable	Mean	Homogeneous Groups
SV2PLSBMN	13.210	A
SV2PLMAMN	11.435	B

Alpha 0.05 Standard Error for Comparison 0.3076
Critical T Value 2.024 Critical Value for Comparison 0.6226
All 2 means are significantly different from one another.

Attachment B-1f
Two-Sieve Pod Length (cm)
Comparison of Means
'Medinah' vs. 'Stayton'
Stanton, Minnesota
2004

11

Statistix 8.0

4/7/2005, 10:28:13 AM

Descriptive Statistics

Variable	N	Mean	SD	Minimum	Maximum
SV3PLMAID	20	12.460	0.6134	11.500	13.700
SV3PLSBID	20	14.530	0.8007	12.600	16.000

Attachment B-2a
Three-Sieve Pod Length (cm)
Descriptive Statistics
'Medinah' vs. 'Stayton'
Nampa, Idaho
2004

12

200600051

Statistix 8.0

4/7/2005, 10:32:34 AM

One-Way AOV for: SV3PLMAID SV3PLSBID

Source	DF	SS	MS	F	P
Between	1	42.8490	42.8490	84.2	0.0000
Within	38	19.3300	0.5087		
Total	39	62.1790			

Grand Mean 13.495 CV 5.29

	Chi-Sq	DF	P
Bartlett's Test of Equal Variances	1.30	1	0.2542
Cochran's Q	0.6302		
Largest Var / Smallest Var	1.7043		

Component of variance for between groups	2.11702
Effective cell size	20.0

Variable	Mean
SV3PLMAID	12.460
SV3PLSBID	14.530
Observations per Mean	20
Standard Error of a Mean	0.1595
Std Error (Diff of 2 Means)	0.2255

Attachment B-2b
 Three-Sieve Pod Length (cm)
 AOV
 'Medinah' vs. 'Stayton'
 Nampa, Idaho
 2004

13

200600051

Statistix 8.0

4/7/2005, 10:33:44 AM

LSD All-Pairwise Comparisons Test

Variable	Mean	Homogeneous Groups
SV3PLSBID	14.530	A
SV3PLMAID	12.460	B

Alpha	0.05	Standard Error for Comparison	0.2255
Critical T Value	2.024	Critical Value for Comparison	0.4566
All 2 means are significantly different from one another.			

Attachment B-2c
Three-Sieve Pod Length (cm)
Comparison of Means
'Medinah' vs. 'Stayton'
Nampa, Idaho
2004

14

200600051

Statistix 8.0

4/7/2005, 10:51:45 AM

Descriptive Statistics

Variable	N	Mean	SD	Minimum	Maximum
SV3PLMAMN	20	12.390	0.9657	9.8000	13.500
SV3PLSBMN	20	13.905	0.7564	12.300	15.700

Attachment B-2d
Three-Sieve Pod Length (cm)
Descriptive Statistics
'Medinah' vs. 'Stayton'
Stanton, Minnesota
2004

15

200600051

Statistix 8.0

4/7/2005, 10:18:37 AM

One-Way AOV for: SV3PLMAMN SV3PLSBMN

Source	DF	SS	MS	F	P
Between	1	22.9523	22.9523	30.5	0.0000
Within	38	28.5875	0.7523		
Total	39	51.5398			

Grand Mean 13.148 CV 6.60

	Chi-Sq	DF	P
Bartlett's Test of Equal Variances	1.09	1	0.2956
Cochran's Q	0.6198		
Largest Var / Smallest Var	1.6301		

Component of variance for between groups	1.11000
Effective cell size	20.0

Variable	Mean
SV3PLMAMN	12.390
SV3PLSBMN	13.905
Observations per Mean	20
Standard Error of a Mean	0.1939
Std Error (Diff of 2 Means)	0.2743

Attachment B-2e
Three-Sieve Pod Length (cm)
AOV
'Medinah' vs. 'Stayton'
Stanton, Minnesota
2004

16

Statistix 8.0

4/7/2005, 10:21:11 AM

LSD All-Pairwise Comparisons Test

Variable	Mean	Homogeneous Groups
SV3PLSBMN	13.905	A
SV3PLMAMN	12.390	B

Alpha 0.05 Standard Error for Comparison 0.2743
Critical T Value 2.024 Critical Value for Comparison 0.5553
All 2 means are significantly different from one another.

Attachment B-2f
Three-Sieve Pod Length (cm)
Comparison of Means
'Medinah' vs. 'Stayton'
Stanton, Minnesota
2004

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved OMB NO 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Garden Bean (*Phaseolus vulgaris* L.)

NAME OF APPLICANT (S) Syngenta Seeds, Inc	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME Stayton
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country) 600 N. Armstrong Place Boise, ID 83704		PISTILLATE/STAMINATE PYPO NUMBER 200600051

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., 0 9 9 or 0 9) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties centered in the same trial. Measured data should be for SPACED PLANTS. Ranges should also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____
Please answer all questions for your variety; lack of response may delay progress of your application.

1. TYPE:

1 1 = Garden 2 = Flageolet 3 = Romano

2. MARKET MATURITY:

5 3 Days to Edible Pods

X X X X X Heat Units to Edible Pods

0 3 Number of Days Earlier Than

Same As

0 1 Number of Days Later Than

8

X

6

Comparison Variety

Comparison Varieties

1 = Tender crop

3 = Gold rush

5 = Gitana

7 = Bush Blue Lake 290

8 = Other (Specify Below)

2 = Kentucky Wonder

4 = Slenderette

6 = Provider

Medinah

3. PLANT:

0 6 cm Spacing Between Plants in a Row

1 Habit 1 = Determinate

2 = Indeterminate, Erect Stem and Branches

3 = Indeterminate with Weak and Prostrate Stem and Branches

4 = Indeterminate Climbing Habit with Weak, Long, and Twisted Stem and Branches

4 7 cm Height

0 5 cm Shorter Than

Same Height As

0 3 cm Taller Than

4

X

5

Comparison Variety

Not same height as comparison varieties

Use Comparison Varieties from Section 2

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CPV/US C (Garden Bean)

3. PLANT: (continued)

2 6

cm Spread

0 5

cm Narrower Than

8

X

Same Width As

X

cm Wider Than

XX X

Not same width as comparison varieties

Comparison Variety

Use Comparison Varieties from Section 2

Not wider than comparison varieties

3

Pod Position: 1 = Low 2 = High 3 = Scattered

4

Bush Form (Illustrated Below)



1 = Spherical Bush Form



2 = Stem Bush Form



3 = Wide Bush Form



4 = High Bush Form

5 = Other (Specify) _____

4. LEAVES:

1

Surface:

1 = Dull

2 = Glossy

3 = Indeterminate

1

Size:

1 = Small (Gitana)

2 = Medium

3 = Large (Tender Crop)

3

Color:

1 = Light Green (as Light or Lighter than Gold Rush)

2 = Medium Green

3 = Dark Green (as Dark or Darker than Bush Blue Lake 290)

5. ANTHOCYANIN PIGMENT:

(1 = Absent

2 = Present)

1

Flowers

1

Stems

1

Pods

1

Seeds

1

Leaves

1

Petioles

1

Peduncles

1

Nodes

6. FLOWER COLOR AND DAYS TO BLOOM:

2

Color of Standard

1

Color of Wings

2

Color of Keel

3 5

Days to 50% Bloom

Flower Color Choices

1 = White 2 = Cream

3 = Pink 4 = Lilac

5 = Purple 6 = Blue

7 = Other (Specify) _____

7. PODS (Edible Maturity):

3

Exterior Color:
(Fresh)

1 = Light Green (as Light or Lighter than Provider)

2 = Medium Green

3 = Dark Green (as Dark or Darker than Bush Blue Lake 290)

4 = Yellow (Gold Rush)

5 = Green-red Variegated (Horticultural)

6 = Other (Specify) _____

2

Processed Pods (Exterior Color):

1 = Light (Tender Crop)

2 = Dark (Bush Blue Lake 290)

1

Dry Pod Color:

1 = Buckskin (Sprite)

2 = Green, Persistent Chlorophyll (Hystyle)

7. PODS (continued):

3

Cross Section Pod Shape:
(Middle of the Pod)

1 = Flat

2 = Heart (Pear)

3 = Round

4 = Figure Eight



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2

Crease Back: 1 = Present 2 = Absent

1

Pubescence: 1 = None (Slenderette) 2 = Sparse 3 = Considerable (Provider or Sprite)

2

Constriction (interlocular Cavitation): 1 = None 2 = Slight 3 = Deep

1 3

mm Spur Length

2

Fiber: 1 = None (Bush Blue Lake 290) 2 = Sparse 3 = Considerable (Sprite)

6

Number of Seeds per Pod

2

Suture String: 1 = Present 2 = Absent

3

Seed Development: 1 = Slow (Bush Blue Lake 290) 2 = Medium 3 = Fast (Provider)

1

Machine Harvest: 1 = Adapted 2 = Not Adapted

Percent sieve size distribution at optimum maturity for not-flat pods

4.76 to 5.76mm	5.76 to 7.34mm	7.34 to 8.34mm	8.34 to 9.53mm	9.53 to 10.72 mm	>10.72mm
4 %	56 %	39 %	1 %	%	%

3 Sieve

1 4

cm Length

0 7

mm width

0 7

Total mm Thickness

4 Sieve

1 4

cm Length

0 7

mm width

0 8

Total mm Thickness

5 Sieve

cm Length

mm width

Total mm Thickness

6 Sieve

cm Length

mm width

Total mm Thickness

8. SEED COLOR:

3

Seed Coat Luster: 1 = Shiny 2 = Dull 3 = Semi-Shiny 4 = Variable

1

Seed Coat: 1 = Monochrome 2 = Polychrome

0 1

Primary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple
9 = Blue 10 = Black 11 = Other

XX

Secondary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple
9 = Blue 10 = Black 11 = Other

1

Seed Coat Pattern: 1 = Solid 1 = Splashed 3 = Mottled 4 = Striped 5 = Flecked 6 = Dotted

2

Hilar Ring: 1 = Absent 2 = Present

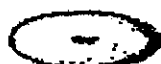
0 1

Hilar Ring Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple
9 = Blue 10 = Black 11 = Other

9. SEED SHAPE AND SIZE:

2

Hilum View:



1 = Elliptical



2 = Oval



3 = Round

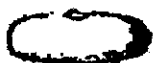
4

Cross Section: 1 = Elliptical 2 = Oval 3 = Cordate 4 = Round

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9. SEED SHAPE AND SIZE: (continued)

1 Side View:



1 = Oval to Oblong



2 = Round



3 = Reniform

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1 6

gm/100 Seeds

0 1

gm/100 Seeds Lighter Than

X X

gm/100 Seeds Same As

gm/100 Seeds Heavier Than

8

X

X

Comparison Variety

Not same gm/100 seeds as comparison varieties
Not Heavier than comparison varieties

10. DISEASE RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

0

Anthracnose (*Colletotrichum lindemuthianum*)☐

Race Alpha

☐

Race Beta

☐

Race Gamma

☐

Race Delta

☐

Race Epsilon

☐

Race Lambda

☐

Race Kappa

☐

Specify Race _____

0

Bean Rust (*Uromyces appendiculatus*)☐

Race 38

☐

Race 39

☐

Race 40

☐

Race 44

☐

Race 45

☐

Race 46

☐

Race 49

☐

Race 50

☐

Race 51

☐

Race 52

☐

Race 54

☐

Race 56

☐

Race 59

☐

Specify Race _____

0

Powdery Mildew (*Erysiphe polygoni*)

0

Fusarium Root Rot (*Fusarium solani* f. sp. *phaseoli*)

0

Pythium Root Rot (*Pythium* spp.)

0

Aphanomyces Root Rot (*Aphanomyces euteiches*)

0

Rhizoctonia Root Rot (*Rhizoctonia solani*)

0

Pythium Blight or Aerial Pythium (*Pythium ultimum*)

0

Angular Leaf Spot (*Isariopsis griseola*)

0

Bacterial Wilt (*Corynebacterium flaccumfaciens* subsp. *flaccumfaciens*)

0

Bacterial Brown Spot (*Pseudomonas syringae* pv. *syringae*)

0

Common Bacterial Blight (*Xanthomonas campestris* pv. *phaseoli*)

0

Halo Blight (*Pseudomonas syringae* pv. *phaseolicola*)☐

Race 1

☐

Race 2

0

Clover Yellow Vein Virus (CYVV)

0

Bean Common Mosaic Virus (BCMV)

☐

BV1

☐

NY15

☐

NL2

☐

NL3

☐

NL4

☐

NL8

☐

Florida

☐

Idaho

☐

Mexican

☐

Western

☐

Type

☒

Other (Specify) _____ 1 gene

0

Yellow Bean Mosaic Virus (BYMV)

0

Curly Top Virus (CTV)

0

Other (Specify Disease and Race or Strain) _____

11. INSECT RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

☐

Aphid

☐

Root Knot Nematode

☐

Leafhopper

☐

Seed Corn Maggot

☐

Lygus

☐

Thrips

☐

Pod Borer

☐

Weevils

☐

Other (Specify) _____

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12. PHYSIOLOGICAL RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

☐

Heat

☐

Cold

☐

Drought

☐

Air Pollution

☐

Ozone

☐

Other (Specify) _____

13. COMMENTS:

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E

STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) Syngenta Seeds, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME Stayton
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 600 North Armstrong Place Boise, ID 83704	5. TELEPHONE (Include area code) 208-465-8522	6. FAX (Include area code) 208-467-4559
7. PVPO NUMBER 200600051		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

Garden Bean, Stayton, was bred and developed by plant breeders employed by Syngenta Seeds. By agreement between the employee and Syngenta Seeds, all rights to any invention, discovery or development made by the employee while employed by Syngenta Seeds were assigned to Syngenta Seeds, with no rights retained by the employee

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT F
DECLARATION REGARDING DEPOSIT**

NAME OF OWNER (S) Syngenta Seeds, Inc.	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 600 North Armstrong Place Boise, ID 83704 USA	TEMPORARY OR EXPERIMENTAL DESIGNATION VARIETY NAME Stayton
NAME OF OWNER REPRESENTATIVE (S) Kim Briggs	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 6338 Highway 20-26 Nampa, ID 83687	FOR OFFICIAL USE ONLY PVPO NUMBER 200600051

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Signature

Date

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